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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/533,685	03/23/2000	Michael Lee Hearn	600.1040	9876

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DAVIDSON, DAVIDSON & KAPPEL, LLC
485 SEVENTH AVENUE, 14TH FLOOR
NEW YORK, NY 10018

EXAMINER

DEXTER, CLARK F

ART UNIT PAPER NUMBER

3724

DATE MAILED: 12/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/533,685

Applicant(s)
Hearn

Examiner
Clark F. Dexter

Art Unit
3724



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sep 9, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above, claim(s) 2, 10-14, 16, 17, and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-9, 15, and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

1. The amendment filed September 9, 2002 has been entered. It is noted that in view of the new amendment practice under 37 CFR 1.121 which became mandatory for all amendments on March 1, 2001, and due to the limited amount of examining time per application, if the amendment contains changes to existing language that requires a marked-up version showing those changes, the Examiner is relying upon the marked-up version(s) for examination of the application. It is applicant's responsibility to ensure that the clean version(s) is (are) the same as the marked-up version(s). It is further noted that the clean version(s) is (are) considered to be the Official version(s).

Claim Rejections - 35 USC § 112

2. Claims 1, 3-9 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 6-7, [✓]the recitation “a circumferentially-extending nipping cylinder surface for providing a second nip for the web” is vague and indefinite as to what structure is being set forth for the surface, particularly since it is not clear as to how a single surface can define a nip and since another structure/surface has not been set forth with which the second nip is being formed.

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Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Boston et al.,
pn 5,740,709.

Boston discloses a cutting device with every structural limitation of the claimed invention including a cutting cylinder (e.g., 160) and an anvil cylinder (e.g., 162).

Claim Rejections - 35 USC § 102/103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3, 4 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Boston et al., pn 5,740,709.

Boston discloses a device with every structural limitation of the claimed invention as best understood including a first cutting and nipping device (e.g., including 160, 162) and a second

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cutting and nipping device (e.g., including 164, 166), wherein the second cutting and nipping device has a cutting cylinder (e.g., 164) with a circumferentially-extending cylinder surface.

In the alternative, if it is argued that the limitation is intended to include the anvil cylinder of the second cutting and nipping device and the nip that is formed between the cylinders, it is the Examiner's position that such nip forming structure is old and well known in the art and provides various known benefits; for example, Boston discloses such nip forming structure on the first cutting and nipping device, specifically nip rings 135, and teaches that such structure facilitates the guiding the web. Therefore, it would have been obvious to one having ordinary skill in the art to simply add nip rings to the second cutting and nipping device to further enhance the guiding of the web through the second device.

Claim Rejections - 35 USC § 103

7. Claims 5-8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boston et al., pn 5,740,709 in view of Sturtz, pn 4,249,441 and Littleton, pn 5,103,703.

Boston discloses an apparatus with almost every structural limitation of the claimed invention but lacks (a) a urethane outer coating on the anvil cylinder and on the cutting cylinder; (b) a two-part metallic hub including a urethane layer bonded to the outer surface of the hub; and (c) the segmented cutting element bolted to the hub of the cutting cylinder.

Regarding (a), the Examiner takes Official notice that it is old and well known in the art to provide an outer coating of urethane on both cutting cylinders and anvil cylinders for various

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well known benefits including enhancing the friction characteristics of the outer surface of the cylinder; for example, Sturtz discloses one example wherein a urethane coating is provided as an outer layer of both an anvil cylinder and a cutting cylinder for enhancing the frictional forces of the particular roll, in this case between the roll and the work piece. Littleton discloses another example of an anvil cylinder (e.g., 38) having a urethane outer coating. Therefore, it would have been obvious to one having ordinary skill in the art to provide an outer coating of urethane on one or both of the cutting cylinders and anvil cylinders of Boston for various well known benefits including that described above.

Regarding (b), the Examiner takes Official notice that it is old and well known to provide a two-part metallic hub, and further to coat such a hub with urethane. In particular, the Examiner takes Official notice that it is old and well known in the art to form hubs in various configurations regarding number of parts thereof to facilitate assembly, maintenance or other well known design configurations. Further, for the reasons described above, it is old and well known in the art to provide an outer coating of urethane on cylinder hubs. Therefore, it would have been obvious to one having ordinary skill in the art to provide a two-part metallic hub, and further to coat such a hub with urethane for the well known benefits including those described above.

Regarding (c), the Examiner takes Official notice that it is old and well known in the art to bolt the segmented cutting element to the hub of the cutting cylinder. For example, Littleton discloses a cutting apparatus wherein the cutting knives are bolted to the hub. Such a

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configuration provides various well known benefits including simple removal and replacement of the cutting knives as well as inexpensive structure for reliably and releasably connecting the knives to the hub. Therefore, it would have been obvious to one having ordinary skill in the art to bolt the segmented cutting element to the hub of the cutting cylinder in the device of Boston for the well known benefits including those described above.

Response to Arguments

8. Applicant's arguments filed September 9, 2002 have been fully considered but they are not persuasive.

In the fourth paragraph on page 4 of the amendment, applicant argues that "[T]he second pair of cutting cylinders 164, 166 of Boston does not form a nip, as clearly shown by the cylinders 164, 166 being spaced apart in Fig. 3." The Examiner respectfully disagrees with applicant's analysis. Claim 1 only requires that the second cutting and nipping device form a nip, e.g., by virtue of the recitation of "nipping device." There is no requirement for a nip to be formed between two cylinders. In fact, only one cylinder, a cutting cylinder, is set forth in claim 1.

Also in the fourth paragraph on page 4 of the amendment, applicant argues that "there is no teaching or disclosure in Boston that the cylinders 164, 166 have 'a circumferentially-extending nipping cylinder surface' as claimed in amended claim 1." The Examiner again respectfully disagrees with applicant's analysis. Boston clearly discloses that the cutting

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cylinder 164 has a circumferentially extending cylinder surface. It is not clear what is intended by the term “nipping,” particularly since no other structure/surface has been set forth with which the claimed nip is formed. Further, the cylinder surface of the cutting cylinder 164 clearly assists in providing the second nip; for example, the cylinder surface clearly helps to form the second nip and supports the belt 140 which forms part of the second nip.

In the second paragraph on page 5 of the amendment, applicant argues that “[I]n the first pair of cylinders separate nip rings 135 are used at the axial edges of the cylinders 160, 162, and thus cutting cylinder 160 does not have a nipping surface at all.” The Examiner respectfully disagrees with applicant’s analysis. The Examiner considers the nip rings 135 as part of the cutting cylinder 160, and thus the structure disclosed by Boston meets the claimed limitations.

Regarding applicant’s arguments in the last two paragraphs on page 5, the Examiner respectfully maintains that providing a urethane outer coating on an anvil cylinder is old and well known in the art and numerous references can be cited providing various evidence thereof.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark Dexter whose telephone number is (703) 308-1404. The examiner's typical work schedule is Monday, Tuesday, Thursday and Friday, and he can be reached during normal business hours on these days.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Allan Shoap, can be reached at (703)308-1082.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-1148. The fax numbers for this group are: formal papers - (703)305-3590; informal/draft papers - (703)305-9835.



Clark F. Dexter
Primary Examiner
Art Unit 3724

cf
December 2, 2002